

What I learned is that we will be using virtual machines to emulate different operating systems for this class. I learned what VM is and how we as IT professionals use them as both a way to test configurations and new software as well as scale for enterprise use. I also learned the main benefit to VM is that if you break something in a VM, it provides an easy way to just rollback the image to a good known configuration.

1. What is a Virtual Machine? A virtual machine is a way to run any type of operating system by using hardware emulation to create a virtual computer within an existing operating system environment.

2. What are advantages of having a Virtual Machine?

Some of the advantages of a virtual machine are that it gives you a way to test unknown software in a controlled environment, providing additional security.

It also gives you a way to sandbox malicious software, giving you a way to test the way malicious software interacts with the different components of the operating system and virtualized hardware.

It gives you a way to be able to create a secure baseline image and be able to scale said image out to an entire enterprise, it also gives the ability to rapidly recover from a malware incident by being able to wipe a corrupt image and start over from a clean image.

3. Why do we have virtual machines? It enables us to create new “computers” without the need for physical hardware. Decreasing cost. It allows us to spin up new systems rapidly and if something breaks, we can quickly roll back to an existing known good configuration.

4. Does a Virtual Machine require hardware? Yes, you need an operating system and a compatible system to be able to create your own VM. There are ways to run them in the cloud, but technically they still use hardware, it’s just cloud based.

5. What is a host machine and a guest machine? The host machine is the machine that you are using to access the virtual machine. The VM is the guest machine.

6. What is Virtualization? It is software that can use hardware. The ability to “create” new computers on the fly without the need for additional hardware.